

4. ACTION AGENDA FUNDING

TRACKING COSTS, ACCOMPLISHMENTS, AND RECOMMENDATIONS

The Action Agenda and its performance management system are intended to help guide spending on the most important priorities. In this section, the Partnership presents information on the funding that was provided to implement the measures in the *2008 Action Agenda* and funding estimates for implementation of the measures in the *2012 Action Agenda*. The estimates were prepared by owners of the Near Term Actions based upon assumptions of the level of work that will be required.

Chapter 4 also includes a description of several of the key funding strategies that have been identified by the region as we move forward to implement the *2012 Action Agenda*, a summary of the key accomplishments in the use of state funds during the last biennium, and recommendations on how expenditures can be better aligned with our regional goals.

COST OF IMPLEMENTING THE *2008 ACTION AGENDA*

In 2008, owners of Near Term Actions provided two-year estimates of what it would cost to implement the measures in the newly adopted Action Agenda, as well as information on available funds for completing the work for the 2009–2011 biennium. In 2012, Partnership asked these owners to provide information on what they had actually expended/budgeted for these same Near Term Actions in order to determine the gap between the funding need and the funding available. The estimates were based on budgeted amounts for the 2009–2011 biennium as well as for fiscal year 2012. The additional year was requested because the timeframe for implementing the *2008 Action Agenda* had continued beyond the original two year timeframe (based on the schedule for updating the Action Agenda) and it was important to capture the additional work and expenditures in that third year. The Near Term Action cost estimates and estimated expenditures were converted to average annual estimates in this report, so that they could be compared to determine the funding gap.

During this period, the region benefited from receipt of federal stimulus funding of an estimated \$150.8 million that was critical to our accomplishing a number of key actions. The region also received \$77.5 million in federal dollars invested in Puget Sound recovery.

Approximately \$232 million was allocated through the state budget to Near Term Actions in the Action Agenda for the years 2010–2012. Non-state funding was approximately \$117 million.

Table 1 is a summary table that distinguishes the estimated annual cost for Near Term Actions, organized by strategic priorities, compared to estimated expenditures to determine the funding gap. The *2008 Action Agenda* included the following strategic priorities:

Priority A - Protect intact ecosystem processes, structures and functions

Priority B - Restore the ecosystem process, structures and functions

Priority C - Prevent water pollution at its source

Priority D - Work together as a coordinated system

Priority E - Build an implementation, monitoring and accountability management system

As illustrated in Table 1, the estimated annual cost for state agencies' Near Term Actions for the *2008 Action Agenda* was \$418 million whereas the estimated annual expenditures was only \$232 million, resulting in a funding gap of just under \$187 million. Without the federal stimulus funding received by Washington State during the last few years, the gap would have been even larger. These stimulus funds were provided on a one-time basis and the state is now facing federal funding cuts rather than increases. This, in addition to the recession the state has faced, which has resulted in significant cuts to state funding, will likely mean that the funding gap between the cost of implementing the Action Agenda and funding available for this work may continue to grow.

Table 1: Annual Estimates for 2008 Action Agenda Near Term Actions by Strategic Priority, State Owners (rounded)

Strategic Priority	Annual Cost Estimate ¹	Annual Estimated Expenditures	Estimated Funding Gap
A - Protect	\$86,202,000	\$44,148,000	\$42,054,000
B - Restore	\$73,259,000	\$40,741,000	\$32,518,000
C - Prevent	\$185,136,000	\$101,639,000	\$83,497,000
D - Work together	\$28,416,000	\$21,694,000	\$6,722,000
E - Build	\$45,246,000	\$23,550,000	\$21,696,000
TOTAL	\$418,259,000	\$231,772,000	\$186,487,000

The strategic priority D “Working together as a coordinated system” received about three quarters of the funding needed for this work. Collectively, the other strategic priorities received only half of the funding needed with the largest shortfall in water pollution prevention activities (\$83 million). The lack of funding has a direct impact on the ability to implement and complete actions that play a critical role in the achievement of our 2020 recovery goals.

A breakdown of the estimates and expenditures for each of the Near Term Actions is provided in Appendix B (pp. 206-223).

Table 2 shows the estimated Near Term Action expenditures by operating, capital, and transportation budgets. Thirty percent of the expenditures were in the operating budget, 62% in capital, and 8% in transportation. Major capital projects include investments in upgrades to municipal and industrial wastewater facilities, retrofitting stormwater systems, and protecting and restoring ecosystem habitat.

Table 2: Estimated Annual Near Term Action Expenditures by Strategic Priority and Budget Type, State Agencies (rounded)

Strategic Priority	Estimated Operating Expenditures	Estimated Capital Expenditures	Estimated Transportation Expenditures	Total Estimated Expenditures
A - Protect	\$20,935,000	\$23,213,000	\$0	\$44,148,000
B - Restore	\$2,012,000	\$26,412,000	\$12,317,000	\$40,741,000
C - Prevent	\$19,436,000	\$76,314,000	\$5,890,000	\$101,639,000
D - Work together	\$4,304,000	\$17,390,000	\$0	\$21,694,000
E - Build	\$23,441,000	\$0	\$109,000	\$23,550,000
TOTAL	\$70,128,000	\$143,329,000	\$18,316,000	\$231,772,000

OTHER ACTION AGENDA IMPLEMENTATION FUNDING

In addition to the investments in Puget Sound recovery work by state agencies, non-state partners such as federal agencies and local governments also provided funding for Action Agenda Near Term Action implementation during this three-year time period. For example, the Environmental Protection Agency (EPA) invested \$51 million toward implementing high-priority remediation and clean-up projects in the Puget Sound and to support federal and other facilities in the reduction of nutrients and pathogens especially in already impaired areas. The US National Park Service spent over \$51 million during this period on the Elwha dam removal and ecosystem restoration (see Chapter 1 for additional information about this project). The U.S. Fish and Wildlife Service (USFWS) invested over \$7 million to complete large-scale restoration projects at the mouths of major river systems in Puget Sound to restore ecosystem function. In addition, the National Oceanic and Atmospheric Administration (NOAA) contributed \$2.5 million toward implementing the Southern Resident Killer Whale plan.

¹Based on original data for the 2009 *State of the Sound* report

Local governments and non-government project partners were also significant contributors to Action Agenda implementation. For example, locals provide considerable matching funds to habitat restoration and protection projects funded by Washington State's Recreation and Conservation Office. Additionally, the Northwest Straits Commission received over \$5 million in funding during this period to remove derelict fishing gear.

ENVIRONMENTAL PROTECTION AGENCY FUNDING FOR PUGET SOUND

In 2011, Region 10 EPA was appropriated federal funding specifically for Puget Sound Recovery efforts. Since that time, EPA has awarded over \$77.5 million to Washington state, local, and tribal governments.

Funding is distributed through lead organizations to implement targeted strategies, mostly through sub-awards to a variety of other entities, for Puget Sound projects. Exhibit A-3 lists the lead organizations, their targeted strategies, and funding received to date.

Of the \$77.5 million that will be distributed, an estimated 60% of the funding helps implement Near Term Actions, and 40% helps implement projects related to the higher level sub-strategies within the Action Agenda. An estimated \$49.2 million of the funding will go to local governments for implementation of projects, \$20.8 million for regional projects, and \$7.5 million for program management. Of the total funding, about 46% will be distributed through competitive processes, giving a wide range of entities and projects the opportunity to receive funding for high-priority actions that will help achieve 2020 targets to protect and restore the Puget Sound.

Figure A-3: Environmental Protection Agency Puget Sound Recovery Funding

Lead Organization	Focus	Amount of Funding received
Dept. of Ecology	Toxics and nutrients reduction and prevention	\$12.3 million
Dept. of Ecology	Protection of at-risk watersheds	\$14.2 million
Dept. of Health	Pathogen reduction and prevention	\$12.2 million
Dept. of Fish and Wildlife	Marine and nearshore habitat restoration and protection	\$12.2 million
Northwest Indian Fisheries Commission	Support implementation of Action Agenda strategies	\$12.1 million
Puget Sound Partnership	Oversee implementation of Action Agenda and stewardship of Puget Sound	\$14.5 million
Total		\$77.5 million

COST ESTIMATES – IMPLEMENTATION OF THE 2012 ACTION AGENDA

The Leadership Council adopted an updated Action Agenda on August 9, 2012. It includes 199 Near Term Actions, including three sets of Strategic Initiatives, and lists a number of the key ongoing programs that are conducted throughout the region. Near Term Actions are the new initiatives, critical next steps in ongoing work and targeted efforts to improve implementation of ongoing activities or ensure these programs have adequate resources to deliver on objectives. Ongoing activities create the foundation for recovery efforts and the regulatory, policy and incentive-based framework upon which near-term actions are built. Regional leaders are not proposing to reallocate funding away from ongoing activities to the “change agenda” measures called out in the Near Term Actions. The Strategic Initiatives (prevention of pollution from urban stormwater runoff, protection and restoration of habitat, and recovery of shellfish beds) were developed by regional partners to deliver progress at a substantial level over the next two or three years on a more focused set of regional priorities.

In September 2012, Near Term Action owners provided cost estimates for each of the Near Term Actions that they agreed to lead and estimates of the funding they already have available in their respective budgets. The cost estimates included costs that might be incurred by other entities that shared responsibility for the proposed work. Some of the owners were unable to provide total costs for the Near Term Actions because the work proposed requires a lengthy effort to determine total future cost for the work, such as costs for removing shoreline armoring, infrastructure retrofit projects, and land purchases. Where relevant, these are footnoted in the summary tables.

The measures in the 2012 Action Agenda are organized differently from those in the 2008 Action Agenda. The work is divided into five broad categories:

Category A - Freshwater and Terrestrial Protection and Restoration

Category B - Marine and Nearshore Protection and Restoration

Category C - Pollution Prevention and Cleanup

Category D - Strategic Leadership and Collaboration

Category E - Funding Strategy

Below are tables that summarize the cost estimates and available budgets for the 2012 Action Agenda Near Term Actions for state fiscal year 2013 and the 2013–15 biennium. The implementation period for these Near Term Actions is from one to three years. The budgeted amount does not include estimated new capital expenditures for the 2013–15 Biennium because, unlike operating appropriations, new capital budget appropriations are zero-based (that is, they assume zero carry-forward level) each biennium. Figure B-1 represents the overall Near Term Action costs and estimated budgets for state agencies by strategy. Figure B-2 is an expanded version of Figure B-1 that shows Near Term Action costs and estimated budgets for all owners: state, local, tribal, federal and non-governmental organizations

Figure B-1: Three-year Near Term Action estimates for 2012 Action Agenda, state agencies (rounded)

Strategies	Cost Estimate	Estimated Budget	Estimated Funding Gap
A - Freshwater	\$397,696,000 ²	\$28,423,000	\$369,273,000
B - Marine & Near-shore	\$24,104,000	\$17,866,000	\$6,238,000
C - Pollution	\$82,150,000	\$48,132,000	\$34,018,000
D - Leadership	\$4,283,000	\$4,219,000	\$64,000
E - Funding Strategy	\$13,884,000	\$10,831,000	\$3,053,000
TOTAL	\$522,117,000	\$109,471,000	\$412,646,000

² Strategy A - Freshwater cost estimate includes \$350 million in capital costs related to Chinook investment (NTA A6.1.1)

Exhibit B-2: Three-year Near Term Action estimates for 2012 Action Agenda, all Near Term Action owners (rounded)

Strategies	Cost Estimate	Estimated Budget	Estimated Funding Gap
A Freshwater	\$443,832,000 ²	\$38,533,000	\$405,299,000
B Marine & Near-shore	\$31,879,000	\$19,271,000	\$12,608,000
C Pollution	\$104,089,000	\$50,194,000	\$53,895,000
D Leadership	\$5,563,000	\$5,154,000	\$409,000
E Funding Strategy	\$13,884,000	\$10,831,000	\$3,053,000
TOTAL	\$599,247,000	\$123,983,000	\$475,264,000

Figure B-1 shows that there is currently a budget gap of over \$400 million for state agencies' Near Term Actions across all 2012 Action Agenda strategies. Based on cost estimates, state agency owners (leading on 160 of 199 Near Term Actions) account for the vast majority (87%) of funding need for Near Term Action implementation. It should be emphasized that budget estimates may not include capital funding for the 2013–15 biennium. This is particularly relevant to Strategy A – Freshwater and Terrestrial Protection and Restoration – where 2013-15 biennium capital budgets are likely to have a significant effect on the funding gap. For example, on average the state has provided \$32.5 million in capital funding per year for implementing the three-year Puget Sound Chinook Salmon recovery workplans over the last three biennia.

In total, as Figure B-2 shows, cost estimates to implement all Near Term Actions over the one to three year period are \$599 million, compared to a current budget estimate of \$124 million. This represents a funding gap of \$475 million. The largest share of the overall Near Term Action cost estimate is covered by Strategy A – Freshwater, at almost three quarters of the total (\$444 million, with \$38.5 million currently budgeted).

Strategic Initiatives

The 2012 Action Agenda for Puget Sound includes three Strategic Initiatives designed to guide our priorities for 2012 and 2013. These are the areas where we intend to focus time and resources, to increase funding, to seek changes that improve policy, to report success and apply lessons learned, and to educate and engage citizens in the recovery effort. Figure B-3 shows state agency financial estimates for the Near Term Actions aligned with the three Strategic Initiatives: Prevention of pollution from urban stormwater runoff; Protection and restoration of habitat; and Recovery of shellfish beds. As the table shows, in these priority areas of focus there is currently an estimated funding gap of around \$350 million. It is important to understand that this funding gap is simply for those Near Term Actions identified for Strategic Initiatives and does not account for shortfalls of all ongoing programs that are the centerpiece of the work of all of the state, federal, local agencies and Puget Sound tribes, such as current and future costs for stormwater protection.

Figure B-3: Three-year estimates for Near Term Actions associated with Strategic Initiatives in the 2012 Action Agenda, state agency owners

Strategic Initiative	Cost Estimate	Estimated Budget	Estimated Funding Gap
Protect Habitat	*\$370,566,000 ²	\$25,566,000	\$345,000,000
Prevent Pollution from Urban Storm-water Runoff	\$15,216,000	\$12,621,000	\$2,595,000
Recover Shellfish	\$8,343,000	\$7,015,000	\$1,328,000
TOTAL	\$394,125,000	\$45,202,000	\$348,923,000

Note: The cost estimates do not represent costs for recovery Puget Sound but are for implementing the Action Agenda Near Term Actions. Cost estimates do not account for shortfalls of all ongoing programs that are the centerpiece of the work of all of the state, federal, local agencies and Puget Sound tribes, such as current and future costs for stormwater protection.

Figure B-4, below, is an expanded version of Figure B-3 that shows costs and estimated budgets for Near Term Actions associated with Strategic Initiatives for all owners: state, local, tribal, federal and non-governmental.

Figure B-4: Three-year estimates for Near Term Actions associated with Strategic Initiatives in the 2012 Action Agenda, all Near Term Action owners

Strategic Initiative	Cost Estimate	Estimated Budget	Estimated Funding Gap
Protect Habitat	*\$379,317,000 ²	\$26,879,000	\$352,438,000
Prevent Pollution from Urban Storm-water Runoff	\$20,916,000	\$12,621,000	\$8,295,000
Recover Shellfish	\$8,343,000	\$7,015,000	\$1,328,000
TOTAL	\$408,576,000	\$46,515,000	\$362,061,000

As we have noted above, the cost estimates for Near Term Actions in many instances represent only the costs for implementing the specific actions as written in the Action Agenda. This is particularly true for the Strategic Initiatives. The estimates do not account for shortfalls in the ongoing programs that are the centerpiece of the collective work in Puget Sound on these issues. For example, local governments are significant contributors to Action Agenda implementation. Those contributions include updating the Growth Management Act (GMA) and Shoreline Management Act (SMA), – both of which are key elements in the Strategic Initiatives (B1.2 NTA1 and A1.2 NTA 1). The local government cost for this work has not yet been estimated. Nor do the estimates include many of the ongoing and future costs for storm water, flood control and septic system repairs. For example, Coastal Counties spent \$44.5 million on storm water in 2011. Cities in the Puget Sound region spent at least \$245 million in 2011.³

The estimated budget to implement the Near Term Actions and Strategic Initiatives in the 2012 Action Agenda only includes capital funding for FY 2013 for state agencies. Estimated capital budget amounts for the 2013–15 biennium are not included. If it is assumed that state funding will continue at the historic levels of \$32 million per fiscal year in the capital budget for activities to implement Chinook Salmon recovery three year work plans, then the estimated funding gap for state owned Near Term Actions is reduced to \$349 million for all strategies and \$285 million for implementing Near Term Actions aligned with the Strategic Initiatives.

We anticipate that the Puget Sound Partnership Ecosystem Coordination Board subcommittee on funding will work with local governments and other responsible entities as we develop a more robust gap analysis for the Strategic Initiatives in early 2013.

³Based on stormwater utility revenues reported to the Local Government Finance Reporting System of the Washington State Auditor. At the time of publishing, not all cities in the Puget Sound region had reported their 2011 revenues. Based on the trends, between cities and counties, we can expect an investment of almost \$900 million over the next three years on stormwater work alone.

OTHER ACTION AGENDA IMPLEMENTATION FUNDING

In addition to state agencies, a significant number of near-term actions are owned by local, federal, tribal, and non-governmental entities. For example, the 2012 Action Agenda contains a sizeable number of locally focused Near Term Actions owned by local jurisdictions and non-governmental organizations involving a range of specific implementing actions. Not all of the Local Implementing Organizations in Puget Sound have submitted Near Term Actions for the Action Agenda. They anticipate adding these over time once local priorities are fully vetted. Cost estimates will therefore be updated as appropriate. There are some capital costs included in the estimates, but these are based on three-year projected costs. Full cost estimates were not available at the time of the information request.

Of the three federal agency owners of Near Term Actions, the Environmental Protection Agency and the National Oceanic and Atmospheric Administration were unable to provide financial information for their Near Term Actions at this time. Estimates for all reported Near Term Actions are itemized in Appendix C.

SUMMARY

The cost estimates provided in the tables above specifically focus on the costs for implementing the 2012 Action Agenda Near Term Actions and therefore should not be represented as the full cost for recovering Puget Sound. There are likely funding gaps for ongoing programs that are the centerpiece of the work of all of the state, federal, local agencies and Puget Sound tribes. Those estimates represent only a portion of the costs for the on-the-ground protection and restoration work, and remediation of existing pollution. They also do not include the current and future costs for stormwater, flood control, and septic system repairs. For example, PSP estimates that the cost of addressing stormwater impacts of existing development alone will be on the order of at least \$3 billion.

The fiscal analysis provided in this subsection is intended to inform the Governor and Legislature of what the region believes are the key priorities in the near future that require public support with the understanding that there are competing priorities that are equally compelling and challenging. The funding gap analysis demonstrates that if we do not substantially increase funding or re-prioritize our expenditures, then we will not achieve the targets we have set for 2020.

APPENDICES:

Appendix B: 2008 Action Agenda Near Term Action Financial Estimates, All Owners, By Chapter

Appendix C: 2012 Action Agenda Near Term Action Financial Estimates, All Owners, By Chapter

FUNDING STRATEGIES IN THE ACTION AGENDA

This section summarizes the approaches outlined in the Action Agenda to increase funding for implementation of the 2012 Action Agenda. There is a critical need for more stable, diverse and dedicated sources of funding that can be relied upon to continue and ultimately complete the work of protecting and restoring Puget Sound. Increased capacity can be built by identifying new sources for key programs, using existing funding more strategically and efficiently, and developing innovative market-based approaches. The Action Agenda identifies six key programmatic funding strategies:

- Maintain and enhance federal funding for implementation
- Focus federal agency budgets and national programs
- Maintain, enhance, and focus state funding
- Maintain and enhance local funding

- Develop opportunities for private sector and philanthropic funding
- Develop and implement market-based mechanisms

Several of the innovative near-term actions that address funding needs include:

- A3.1 NTA 3: Forest Watershed Services – DNR will support pilot market transactions for delivery of watershed services from private forest landowners to downstream water beneficiaries in at least the Snohomish and Nisqually watersheds (see local story Chapter 1 Stream Flows Indicator Report).
- A5.4 NTA 2: Ag Land Ecosystem Services Markets – By December 2012, the State Conservation Commission, working with Conservation Districts and Watershed Groups and counties, will have three pilot projects underway that demonstrate ecosystem services markets associated with flood hazard prevention and agricultural lands in floodplains.
- A6.1 NTA 1: Secure Annual Chinook Investment – PSP, in collaboration with the Salmon Recovery council, will secure the annual investment as required to fully implement the approved Puget Sound Chinook Salmon Recovery Plan, and work to align that funding in support of the highest priority protection and restoration projects as identified by the salmon recovery lead entities. This investment strategy will be developed as part of the overall Puget Sound recovery funding strategy.

The Leadership Council requested that the Ecosystem Coordination Board form a sub-committee to work with the Partnership and our regional partners to coordinate the development and implementation of the funding strategy with a focus on the Strategic Initiatives. It will also address funding local agency needs that have been identified. That work is underway. The sub-committee, using the gap analysis as the base for their work, will produce a more detailed report with proposals on how to fill the gaps by the end of calendar year 2012.

A detailed description of the funding strategy may be found in Section E of the 2012 Action Agenda.

ACTION AGENDA IMPLEMENTATION: HIGHLIGHTS OF ACCOMPLISHMENTS IN THE USE OF STATE FUNDS

The 2008 Action Agenda featured near-term actions owned by 11 different state agencies: the Departments of Agriculture; Commerce; Ecology; Fish and Wildlife; Health; Natural Resources; Transportation; the Conservation Commission; Puget Sound Partnership; the Recreation and Conservation Office; and State Parks. The following examples show a selection of highlights in the use of state funds towards Action Agenda implementation.

Department of Ecology

Stormwater & Water Quality – Ecology is currently providing funding for 118 stormwater design and construction projects statewide totaling over \$66 million awarded through the 2012 Supplemental Capital Budget. This adds to the existing 43 stormwater projects that are under construction from \$23 million awarded in the 2010 Supplemental Capital Budget. Approximately two-thirds of this work and funding is focused in Puget Sound.

In addition to Ecology's priority focus on stormwater, the agency has provided funding for 62 projects worth approximately \$115 million through its annual grant and loan programs for clean water projects in Puget Sound over the past three years.

Case Study: City of Arlington Wastewater Treatment Plant Upgrade and Stormwater Wetland Project

– The Department of Ecology provided grant and loan funding to the City of Arlington to facilitate improvements to their wastewater treatment plant and construct a wetland to mitigate pollutants in stormwater runoff. The expansion and upgrade of the wastewater facility included a multi-faceted approach which meets the requirements of the National Pollutant Discharge Elimination System (NPDES) permit and will significantly improve oxygen levels and reduce nutrients in the Stillaguamish River. Additionally the City of Arlington constructed a four cell stormwater

wetland, complete with nearly a mile of walking trails and educational signage, to treat stormwater runoff and provide flow control for stormwater that was previously discharged to the Stillaguamish untreated. Education and outreach efforts have been focused on the creation of urban wildlife habitat as well as the integration of proper stormwater treatment in this urban ecosystem.

Stormwater Case Study Examples – the following are real examples of water quality problems fixed through implementation of the municipal stormwater permit:

- **City of Seattle housing development (New Holly):** Seattle Public Utilities found nearly 50 homes with the sewer pipes connected to the stormwater system. They were found in field screening for illicit discharges. Correcting these, some of which have been in place for 10 years, removed pollution by untreated sewage that was flowing to Lake Washington.
- **Port Angeles fish processing plant** – City staff found the plant was bypassing the sewer line several times a year and sending the processing waste directly into Port Angeles Harbor. The plant corrected the problem.

Shorelines and Coastal Wetlands – Ecology is currently providing \$6.3 million in legislatively-approved grants to 70 cities and counties in the Puget Sound region to help modernize their existing shoreline policies and development regulations. The local regulations are designed to protect water quality and critical habitat, control beach and stream bank erosion, and reduce flood hazards along marine shorelines. The \$6.3 million is divided among six counties and 64 cities based on factors such as miles of shoreline, number of shoreline types, population and growth rates. The money will protect and restore more than 3,000 miles of marine, stream and lake shorelines throughout Puget Sound.

- **Case Study: San Juan Creosote Debris Removal Project** – In late 2011, crew members from Washington Conservation Corps removed more than 70 tons of creosote-treated debris from several nearshore locations on Lopez Island. One crew located and staged debris at the

Fisherman Bay Spit Preserve site for two days in preparation of the helicopter removal. At the end of the first week of work, this same crew headed to Weeks Wetland, where they hand-carried most of the debris from the wetland to the road edge for removal by the heavy equipment operator. A second WCC crew hand-carried debris from several sites.

Toxic Cleanup Case Study: Scott Paper Site Cleanup – In 2011, cleanup was completed on the former Scott Paper site on the shore of Fidalgo Bay in Anacortes. The site historically was used for pulp and paper operations; after those mills closed, the site later was used for other industrial purposes. At the time cleanup started in mid-2009, the site had been unused for several years.

Toxics Reduction: Local Source Control Specialists – The Legislature provided \$2.3 million in the 2007-09 biennium to make sure small businesses had the help they needed to reduce toxic pollution in Washington, especially Puget Sound. The program has proved valuable so state funding has continued, augmented by federal funds. In January 2008, Ecology entered into 14 partnership contracts to use existing expertise in local health agencies and public utility districts to help small business owners prevent pollution. That number has grown to 25 partnerships.

Toxics Source Control Case Study Examples:

- A marine business in Kitsap County had unlabeled drums of chemicals stored outside and didn't have tools on hand in case something spilled. With help from the Kitsap Public Health District, the drums were moved inside and labeled, and a plan was put into place for cleaning up spills in case they occurred. The business also given with a pre-packaged spill kit.
- According to the Puget Sound Toxics Assessment, an estimated 9,200 metric tons of petroleum products are released to the Puget Sound basin every year. A major source of this toxic pollution comes from the motor oil drips and leaks from our motor vehicles. Environmental

educators from Seattle Public Utilities (SPU) and Washington Department of Ecology teamed up to create a program through South Seattle Community College to host about 50 free monthly auto leaks workshops at the school's automotive training center. The program was offered to low-income vehicle owners to help them learn how to identify leaks, undertake preventative maintenance, repair minor leaks, clean up spills, properly dispose of auto fluids, and understand how auto leaks affect Puget Sound. For 2012 and 2013, SPU and Ecology are using a \$200,000 EPA National Estuary Program grant to conduct another 100 auto prevention leak workshops in and around Seattle. SPU and Ecology will conduct post-workshop surveys to assess behavior change.

Spill Prevention, Preparedness, and Response – Ecology's legislative direction is to implement a "zero spills" strategy for Puget Sound and other state waters. To support this goal, Ecology implements a range of effective spill prevention activities including ship and oil transfer inspections, and oil spill prevention plan reviews. As a result of the Spills Program requirements, approximately 90% of all Puget Sound high volume oil transfers are being pre-boomed by industry, reducing the rate of oil transfer spills to approximately one gallon discharged per 100 million gallons of oil transferred.

Case Study: Deep Sea Spill – Ecology led the state's response efforts to the burning and sinking of the 140-foot fishing vessel *Deep Sea* in Penn Cove off of Whidbey Island. During May and June, Ecology worked with DNR and the US Coast Guard to contain and clean up the spill, and remove the vessel that sank next to the Penn Cove commercial shellfish operation in Coupeville. Penn Cove has some of the world's most productive commercial shellfish operations as well as being the state's most popular recreational shellfish area. The Department of Health closed commercial and recreational shellfish beds in Penn Cove until June 8th, 2012. The state and federal

government spent \$3 million cleaning up the 7,000 plus gallon spill and salvaging the abandoned derelict ship (pictured here).



The 140-foot fishing Vessel *Deep Sea* burning in Penn Cove, Island County on May 1, 2012.

Department of Natural Resources

Washington State Department of Natural Resources (DNR) manages or has regulatory responsibility for 41% of the uplands and underwater lands in the Puget Sound basin. DNR implements many programs to protect working forest lands and aquatic lands in support of the state's goal to recover Puget Sound to health by 2020. In the past three years, DNR has posted many accomplishments for the Sound, often in collaboration with partners, including the following:

- **Puget Sound Corps** – DNR passed legislation in 2011 creating Puget Sound Corps, work-crews of youth and military veterans employed on projects to protect and restore Puget Sound. By September 2012, five

crews of six people each were deployed by DNR on water quality work in state forests, removal of invasive species on state owned aquatic lands, and urban forestry restoration projects in the Puget Sound basin.

- **Derelict Vessel Removal** – Since 2009, DNR has worked with local governments and vessel owners to remove 147 derelict vessels, many of these from the waters and shorelines of Puget Sound, where they posed a threat to both navigation and the environment. This biennium, the derelict vessel removal program was directly responsible for the removal of 40 vessels from Washington’s waters. This includes the removal of the *Deep Sea* from Penn Cove (see page 181). In addition to these 40 vessels, DNR facilitated the removal of 25 vessels led by other agencies and local governments.
- **Aquatic Reserves** – DNR has designated and protected four new Aquatic Reserves in Puget Sound since 2009 at Cherry Point, Smith and Minor Islands, Protection Island, and Nisqually Reach.
- **Ediz Hook Restoration** – The Aquatic Restoration program, in partnership with the Lower Elwha Klallam Tribe, completed work to restore an 1,800 linear foot section of Ediz Hook, formerly known as the A-Frame site. The project removed fill, remnant pilings, and a pile bulkhead, and re-graded the shoreline to restore habitat function. DNR and the Tribe have been working together since 2005 on several phases to complete this effort. Additional restoration activities include the continued planning and design for a salt marsh restoration project at Secret Harbor on Cypress Island as well as restoration of a section of the south shoreline of Lake Washington adjacent to the mouth of the Cedar River.
- **Decking and Creosote Pier Removal** – DNR removed 66,795 square feet of overwater decking at the former Asarco smelting site at Point Ruston in 2009–2010 and removed an additional 120 tons of creosote-soak piers and debris from the shorelines around Puget Sound in the 2009–2011 period.

- **Restore Upland Fish Habitat** – DNR continues its work with industrial forest landowners to restore upland fish habitat and disconnect logging roads from transporting sediment into streams, which impairs water quality and harms salmon habitat. For the period of 2009–2011, landowners brought 3,719 miles of road up to state standards, put 659 miles of unneeded roads to bed, and corrected 1,387 barriers to fish passage that opened 741 miles of habitat.

Department of Health

Improvements in Vital Water Quality Measure in Puget Sound Shellfish

Areas – Puget Sound shellfish areas long impacted by contamination from human and animal waste have seen a steady reduction in fecal pollution since 2003. The state Department of Health analyzed results of over 50,000 water quality tests, taken from the same locations at the same frequency for more than a decade, from 38 shellfish growing areas most affected by fecal coliform pollution. The water quality improvements are due to better management of sewage systems, agricultural waste, boating waste, and stormwater runoff near shellfish areas. Many of the 38 areas had been targeted for long-term pollution control efforts carried out by property owners, local governments, tribes, state and federal agencies, volunteer groups, and shellfish farmers.

Shellfish Bed Upgrade in Oakland Bay, Mason County – Improvements to Shelton’s wastewater treatment plant, on-site sewage systems, and farm practices have led to the upgrade of 799 acres of shellfish beds in Oakland Bay in Mason County. This progress has allowed the state Department of Health to change the classification from “Conditionally Approved” to “Approved.” Oakland Bay is home to 19 commercial shellfish companies and a popular public shellfish beach at Bayshore. Mason County created a Shellfish Protection District around Oakland Bay in 2007 because water quality had declined. This group led the work that resulted in noticeable improvement of marine water quality. The City of Shelton upgraded the Shelton Wastewater Treatment Plant and its sewage collection system to reduce impacts on shellfish harvesting areas. The Squaxin Island Tribe, shellfish growers, and hundreds of property owners joined the effort to improve water quality, and the successful collaboration led to this upgraded classification.

Henderson Inlet Commercial Shellfish Area Gains 100 more Acres –

The Department of Health recently upgraded 100 acres of commercial shellfish beds in Henderson Inlet because of improving water quality. This adds to the 240 acres in that area that were upgraded in 2010. Thurston County, the City of Lacey, shellfish growers, and thousands of property owners came together to make a difference. Thurston County created a watershed protection area in Henderson Inlet to improve septic operation and maintenance with a goal of reducing human sources of bacteria. The Henderson Inlet Shellfish Protection District, which the county formed in 2001, contacted area residents to educate them about how livestock and pets can cause water quality problems.

Conservation Commission and Conservation Districts

District Caucus Action Agenda – In 2009, the State Conservation Commission assisted the 12 Puget Sound conservation districts in the development of the District Caucus Action Agenda. This document reflected the districts' implementation of their elements of the broader Puget Sound 2020 Action Agenda. The conservation districts first used data developed at the Puget Sound Partnership Science Panel and Action Areas, where resource threats were identified in each of their conservation district areas. The districts then linked their annual plan of work to these resource threats. The result was a document, the District Action Agenda, describing the work of the conservation districts across the Sound and linking that work to threats and activities in the Puget Sound Partnership Action Agenda. This approach allowed the Commission and districts to ensure their work supported the work of the Partnership and supported the broader goals of Puget Sound.

Funding and Technical Assistance Leveraging – During the period 2009-2011 (state fiscal years), the Conservation Commission provided funding and technical assistance to the 12 Puget Sound conservation districts that in turn used and leveraged those funds to:

- Assist 10,350 landowners
- Improve or enhance 17,022 miles of stream
- Apply practices to 7,509 acres of land

- Install 1,191 practices to address resource concerns
- Contact 2,451 landowners resulting in new actions

Puget Sound Partnership

Levee Vegetation – This work combines public safety, economic security and salmon recovery. Puget Sound levee owners were faced with a Catch-22: in order to receive US Army Corps funding, they were required to remove trees from riverside levees to meet flood protection standards; however, by removing trees, they would raise stream temperature, reduce cover, and potentially violate the Endangered Species Act by impacting Chinook salmon. Puget Sound Partnership worked with regional leaders and the Corps to develop a policy that would be mutually beneficial by supporting safe levees, improving habitat, and addressing system-wide needs in a cost effective and timely manner.

In July 2012, The Partnership executed an historic agreement with the Corps, National Marine Fisheries Service, and USFWS to advance the regional framework approach necessary for durable policy and program solutions. The Partnership continues to work with levee owners to participate in the program and to obtain funding to proceed forward.

Port Susan – Construction of a levee setback at the Nature Conservancy's Port Susan Preserve will remove 7,350 feet of existing dike and create 5,000 feet of new dike to protect and enhance neighboring farmland. This project is near completion and will restore process to 150 acres of tidal marsh in the Stillaguamish River estuary while improving tidal flushing in thousands of acres of Port Susan Bay. The Nature Conservancy is managing this project. Funding for protection and restoration is from the Puget Sound Acquisition and Restoration, Estuarine & Salmon Restoration Program, Salmon Recovery Funding Board, and at the federal level, NOAA and US Fish and Wildlife.

Recreation and Conservation Office

The Recreation and Conservation Office supports Puget Sound health by providing grants to conserve pristine natural areas and restore waterways. In 2011–2012, the Recreation and Conservation Office distributed nearly \$73 million to recover Puget Sound.

Much work has been accomplished through these grant programs since their inception. Grant recipients have:

- Preserved nearly 34,000 acres of habitat
- Treated habitat problems in 1,340 miles of stream
- Removed more than 650 barriers to fish, opening more than 57,000 acres of habitat to salmon species.

These grant programs not only fund on-the-ground projects, but also pay for staff to plan and administer restoration projects, including helping fund the salmon recovery lead entities (local watershed groups responsible for prioritizing salmon recovery projects) and regional salmon recovery organizations (responsible for implementing the federally approved salmon recovery plans).

Case Study: Restoring the Elwha River Ecosystem

In 2011, the federal government, along with many local partners, began its largest dam removal project in United States history—the demolition of two dams that block the Elwha River on the Olympic Peninsula. When all is said and done, the project is expected to open more than 70 miles of habitat to salmon and restore the river's salmon populations from 3,000 to more than 300,000. Dam removal was one step in a larger Elwha River restoration project that includes preventing flooding, managing sensitive species, reducing erosion, restoring fish stocks, and replanting the ecosystem surrounding the dams—many elements of which are funded in part by grants through the Recreation and Conservation Office. See Chapter 1 for additional details (pp. 53-54).

Case Study: Conserving Habitat along the Ohop Creek

The Nisqually Land Trust, along with the Pierce County Conservation District and the South Puget Sound Salmon Enhancement Group, are working on a 13-year initiative to restore six miles of Ohop Creek, which supports threatened Chinook salmon, as well as coho and pink salmon. Ohop Creek is the third-largest tributary to the Nisqually River and is one of the four designated high priority areas for protection and restoration work within the Nisqually River watershed. The land trust is conserving the land and then restoring it. In 2011, the land trust used two grants totaling \$625,000 to protect 152 acres in the Ohop Valley, making it possible to proceed with the next phase of restoration.

Case Study: Removing Barriers to Fish Passage

In 2012, the Family Forest Fish Passage Program received \$10 million for small forest landowners to repair or remove fish passage barriers. Small forest landowners own about four million acres of forests—about half the private forestland in the state. These family forests are home to thousands of miles of fish-bearing streams and play a key role in restoring our thriving fish populations. A single barrier on a stream can keep fish from reaching many miles of upstream spawning and rearing habitat. This program allows working forests to remain viable while supporting ecosystem function. From its start, the program has corrected 242 barrier crossings, and another 20 are under contract. There are 582 landowners signed up for the program.

Case Study: Assessing the Amount of Invasive Species in Puget Sound

In 2010, the Washington Invasive Species Council, which is staffed by the Recreation and Conservation Office, completed its baseline assessment of priority invasive species in the Puget Sound basin. Now, for the first time ever, all known data on priority invasive species is compiled in one place for a thorough analysis of invasive species status, trends, impacts, and pathways in the Puget Sound basin. This project has created new information, derived from existing but disjointed sources, in supporting the understanding of ecosystem conditions in the Puget Sound and identified gaps in protection and control of the species.

The council will use the findings of the assessment to work directly with organizations to fill the most critical gaps and use limited resources where they are most effective. For example, in discovering that no agency had authority for or was addressing invasive marine algae, the council worked with the Washington Department of Ecology and other agencies to pass Substitute Senate Bill 5036. That law provides funding to the Department of Ecology to create an invasive marine algae control program.

The report, *A Baseline Assessment of Priority Invasive Species in the Puget Sound Basin*, includes maps, a database, and species-specific information that can be used by government agencies, non-profits, and tribes in their work combating invasive species and conducting recovery efforts in Puget Sound. The report and database are available on the council's website at www.invasivespecies.wa.gov/council_projects/epa_grant.shtml.

State Parks

Kukutali Preserve Purchase – State Parks, in partnership with the Swinomish Indian Tribal Community, has protected unique habitat through the purchase of Kukutali Preserve on Kiket, Flagstaff, and Fidalgo Islands. Kukutali Preserve includes 84 upland acres on Kiket and Flagstaff Islands and about nine upland acres on Fidalgo Island. The Preserve has more than two miles of nearly intact shoreline, with native eelgrass beds and diverse populations of fish and shellfish. Kukutali Preserve is home to numerous endangered or threatened species and has a broad spectrum of habitats, including mixed deciduous and conifer forests, with significant old-growth trees. Flagstaff Island supports a rare type of environment called a “rocky bald,” which has a fragile, thin soil that hosts a unique community of native plants not found elsewhere.

Washington State Department of Transportation

Fish Passage Corrections – Washington State Department of Transportation (WSDOT) and the Washington Department of Fish and Wildlife (WDFW) have worked cooperatively on a program since 1991 to inventory and correct fish barriers on our highway system. Removal of these barriers increases access to critical spawning and rearing habitat. As of June 30, 2012, WSDOT had completed 168 fish passage correction projects in Puget Sound, improving access to about 422 miles of potential upstream habitat. WSDOT and WDFW are continuing to prioritize the 785 remaining barriers identified in Puget Sound based on potential habitat gain for the greatest number of “at-risk” species, as well as potential return on investment. Barrier corrections are either funded as “stand-alone” corrections, or are combined with large highway projects.

Stand-alone Stormwater Retrofits – WSDOT also makes significant investments in stand-alone stormwater retrofits in the Puget Sound Basin. Not including pavement, which is retrofitted routinely as part of projects, WSDOT invested \$2.6 million in three stand-alone stormwater retrofit projects between state fiscal years 2009 and 2012.

RECOMMENDATIONS REGARDING FUTURE ALIGNMENT OF PRIORITIES AND FUNDING

Washington State has a long and successful tradition of protecting its natural resources while using a bottoms-up approach for selecting and implementing priorities. There are significant numbers of collaborative efforts around Puget Sound with numerous coalitions of interest groups within every watershed. Coalition members may differ in their individual missions, but have learned that when they work to identify common goals, they can achieve results that are mutually beneficial. Our partners have done the difficult work of building the foundation of cooperation that is critical to success. Yet, funding programs and policies have not evolved to meet the demands of multi-interest ecosystem conservation.

RCW 90.71.370(3) requires that the State of the Sound include recommendations on how future state expenditures for all entities, including the Partnership, could better match the priorities of the Action agenda. The following recommendations are put forward to effectively fund and promote the significant regional priorities that must be achieved for the restoration and protection of Puget Sound.

1. Focus on Strategic Initiatives

As noted before, the Puget Sound Partnership has achieved consensus on three Strategic Initiatives that are intended to guide our region's highest priorities for 2012–2013. We should focus our time and resources on providing adequate multi-year funding for these priorities.

Our funding strategy should address the capacity of all partners, including tribal, federal, state and local governments; nonprofits, businesses; private landowners; and other community members. Our implementation strategies should account for differences in the needs and context of each of the watersheds where programs and policies are implemented. Finally, we must monitor, establish and track measureable results, and apply the lessons learned to subsequent efforts so that we may be effective and efficient in what we select to implement and how we use our funding to achieve desired outcomes.

2. Promote Outcomes and Remove Stovepipes

At all levels of government, programs have encountered obstacles to successful project implementation because of the restrictions built into funding sources and policies that limit the use of funds to very specific purposes—purposes, which may not meet the complex demands of restoration at the Puget Sound scale. We also encounter policies that do not foster collaboration or accommodate blending funding sources to meet collective goals. Accordingly, a project that may only partially meet the criteria for a grant either cannot be funded or must be modified to better meet the purpose of the grant rather than the purpose of the project. The grantor does not have flexibility to modify the criteria even if the proposed project meets a critical purpose that is recognized by the agency or multiple purposes unless the entire project conforms to the criteria.

At a recent Leadership Council workshop, representatives of a number of the Local Integrating Organizations (LIOs) emphasized the need for funding that spanned jurisdictional boundaries to accomplish work that would have ecosystem-wide benefits. Other examples included restrictions on the use of infrastructure funds for projects that might have multiple benefits because bond and fee program criteria do not allow them to pay for the portion of the

work that might have ecosystem benefits. An example at the federal level are Farm Bill programs that are tailored to individual landowner activities and are unable to fund landscape-level planning and ecosystem monitoring that could achieve results for water quality or species conservation as well as agricultural production goals.

To address these problems, we recommend policy changes to funding programs, streamlining application and permitting processes, and pooling of multi-agency funding sources to focus on accomplishing objectives. At the federal level, we recommend that the Council on Environmental Quality and the Office of Management and Budget review and amend existing procedures and, if necessary, laws, to allow agencies to pool funds and allow multi-year budgeting that is flexible and focused on meeting outcomes.

3. Transform Collaborative Funding Models to Increase the Pace of Recovery

As mentioned earlier, the region has been successful in employing a collaborative model to fund and implement projects. These efforts have proceeded through the initial stages of a project, including having developed a scope of work, completed, and linked together numerous matching grant programs for implementation. Yet, they find themselves unable to proceed to the next phase either because they are competing for funds with a number of smaller initial projects, or because regional funding is limited to small grants. Restrictions on what will be considered for matching as well as the limitations of some of the smaller entities to provide matching dollars have impeded our ability to move forward with larger scale projects.

The Salmon Recovery Council has taken one of the first steps in addressing this issue by modifying the formula for project funding allocation to prioritize some of the larger scale projects that have regional benefit.

We recommend that public funding agencies and the private philanthropic sectors support a catalyst funding approach for completing the high priority large scale projects that have been developed through collaborative

partnerships. We request that funders use the multi-interest goals and past performance of partners as evidence of the effectiveness of the collaborative proposal as opposed to how many small grants the proposers can cobble together. We also recommend that funders examine their matching requirements to accommodate the realities of some of the partners with limited budgets but who will be contributing to project success.

4. Identify and Fund and Reform Incentive Programs

The *2012 Action Agenda* contains a number of incentive programs proposed as Near Term Actions, including waste disposal for boat owners, property setbacks, best management practices, and low impact development. Within our region, we have emphasized the importance of incentive programs in enabling and motivating business owners and individuals in our communities to modify their practices or incur expenses that they are not required to incur in order to benefit the ecosystem. We need to identify what it will take to fully fund these incentive programs in order to ensure that they produce the results we are seeking.

We also need to work with interest groups to determine what incentives are attractive to them, rather than only creating incentives programs that meet an existing regulatory framework. The incentives should provide opportunities for individuals and businesses to operate more effectively while simultaneously helping the environment.

5. Identify Efficiencies in the Use of Funds

Our region has many funding gaps that restrict our ability to meet our recovery targets. Many of our leaders suggest that in addition to focusing on strategic initiatives for new funding, we examine efficiencies in the regulations and ongoing programs that current exist to ascertain how we might improve outcomes with the limited resources that we have.

FUNDS PROVIDED TO THE PARTNERSHIP

The Puget Sound Partnership received \$5,677,000 in state funds during the FY11–13 biennium and \$15,319,456 in grant and cooperative agreements from EPA, NOAA and RCO.

Appendix E (pp. 244-245) provides two reports on the use of Model Toxics Control Act funds for 2011 and 2012. These are included as specific examples of key programs and projects undertaken by Partnership staff.